

Active Participation in Digital English Language Classes and Elements for Designing Pedagogical Strategies for Online Instruction During Covid-19

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Abstract

Pedagogical strategies which promote active participation are useful tools that teachers can employ to improve learning. This study aims to investigate whether active participation makes a difference in the performance of language learners and to explore pedagogical strategies for coping with the challenges to active participation when learning in a digital learning environment amidst the COVID-19 pandemic. The study group was composed of 100 students studying English online during the Spring semester of 2022. Roughly half of them (n=47) participated in classes real time while the other half (n=53) took them asynchronously by watching video recordings of the classes. The analysis of both groups' test scores showed that there was a statistically significant difference between the students who were actively participating in the live classes via the platforms and those who instead received video classes. Moreover, three themes emerged that were associated with the active participation tasks: 1) interactivity 2) multimodality 3) teacher's professional standards. Pedagogical strategies for encouraging active participation are discussed in terms of theoretical principles and a proposed model for incorporating such strategies when engaged in digital education. The study presents research limitations and suggests further exploration for the improvement of digital educational contexts for learning and teaching languages.

Keywords: Pedagogical strategies, digital pedagogy, active participation, media enriched online environment, synchronous and asynchronous language learning

Introduction

Pedagogy is considered a general term for guiding interactions in educational settings that highlight networked organization among teachers, learners, and institutions. In a digital teaching context, pedagogy has added the term digital in its structure considering the opportunities and limitations afforded by digital platforms on the interactions among teachers, learners, and institutions. In the midst of the rapid transformation of physical classrooms into digital learning spaces in today's world, educational planning has sought out appropriate and innovative pedagogies to facilitate effective teaching in a digital environment. One of the provisions to consider is digital pedagogy, which encompasses the congruence of subject matter education with personal factors, social processes, and available systems while deploying digital tools and content for learning (Anderson, 2020). Emerging technologies and mobile affordances have

brought about rapid changes in formal education (Assunção Flores & Gago, 2020) and accelerated the process of adaptation to digital education by providing viable learning opportunities. Academia has felt an acute need to reconsider digital pedagogies and strategies as well as the role of active participation during the Covid-19 pandemic where the use of digital contexts for continuing education became the only viable solution to safely receive formal education. Reconsidering the pedagogical framework regarding active participation is necessary to develop effective strategies to counter the challenges inherent to a digital classroom. Anderson (2020) argues that digital pedagogies do not diverge from the basic dimensions of learning designs, content delivery, and assessment of outcomes of the traditional pedagogical perspective; but she asserts that there are peculiar challenges and considerations encountered by individual learners when they use digital vectors for their active participation. A key point is that access to digital content through platforms is paramount and system-wide curricula should accommodate institutions that might have different levels of access and information technology infrastructures. Accessibility is the *sine qua non* of digital education as all other dimensions of design are secondary to access to the content. She presents six primary considerations for exploiting the digital environment, suggesting a revisited framework of digital pedagogy. These considerations are adequate course provision, sufficient technical support, adaptability to the needs of students through multiple contexts, the synchronicity of learning experiences, short but effective lectures, presentations and live webinars, and continuous assessment and evaluation activities. The framework undoubtedly develops effective digital pedagogical strategies while enhancing digital teaching and learning through active learner participation. The current study explores whether synchronous online participation in a foreign language course is advantageous to learners in a digital context, and further what factors differentiate such participation from simply engaging with a recording of the same course asynchronously. Answers to these questions should inform both curriculum design and future research for the development of best practices in digital language learning.

Literature Review

Active participation as an indicator of active learning behavior for online learning during the COVID-19 crisis has been explored in the field of language learning and a volume of studies have shown that active participation is especially important in the midst of Covid 19 pandemic (Lin et al., 2021). This has brought to light further issues to consider (Heng & Sol, 2020) when designing pedagogical procedures for providing online lessons while at the same time dealing with the crisis of Covid 19. The impact of a positive affective state on active engagement and persistence in learning has long been marked as crucial when students face tasks for learning (Holzer, 2021; MacIntyre et al., 2020). The uncertainties inherent to the current pandemic coupled with the normal challenges of online participation in classes from home have underscored the impact of affective state on learning. The Covid 19 pandemic and its necessary mitigation measures have precipitated considerable efforts to make students active in the digital space, this was and remains a challenge and has in some instances shown the potential for enhanced learning outcomes. Active participation is associated with engagement and persistence in learning (Holzer, 2021; Mokhtarzadeh, 2021), which are key psychological

characteristics that contribute to successful second language learning. Active participation is considered a pillar implementation of the constructivist learning theory. This foundational theory was developed by Piaget (1971) and proposes that individuals learn by meaningfully creating their knowledge base. The constructionist process entails bridging new ideas and hand-on experiences to *a priori* knowledge and experiences to create a new or enhanced understanding (Bransford et al., 1999). Approaches that promote active learning often propose learning experiences through which students can make connections between new information and their existing mental models, extending their understanding by having them actively taking part and engaging in the experiences. The key to constructivist learning is that learners take part in experiences actively and individually. On digital platforms, active participation may refer to cognitively presenting in the class or being engaged in the tasks and helping to further the lessons as one would normally do in physical learning zones. Like all subject matters, active participation in language classes during the midst of Covid 19 has highlighted certain concerns and limitations of pedagogical strategies. Special emphasis has been put on CALL which has long advocated the utility of technology integration for enhancing outcomes and promoting more effective learning (Chapelle, 2001). From a system perspective, teacher preparedness for using technology has morphed from simply a topic of discussion to a reflection of the reality of current practice (Alimyar & Lakshimi G, 2021). Current studies emphasize that foreign language students prefer a synchronous mode of online learning over asynchronous learning (Özdal et al., 2021) and that synchronous learners outperform asynchronous learners. It is suggested that synchronous learners are more adept with the technology-integrated materials for learning (Köprülü, 2021) and so engage in more interactive participation (Bailey, 2021; Farrah & Jabari, 2020; Huang, 2021). When providing interactive platforms for learning and active participation, pedagogical strategies should be well-defined, and their impact explored comprehensively.

Pedagogical strategies provide a framework of teaching techniques that effectively impact learning. These strategies can inform teachers' practice with a solid basis of education theories and stances. They are founded on classic proven approaches which have paved the way for evolving teaching practices through the decades. Although the core of these strategies such as active learning, engagement, experiencing the learning processes, and so forth are consistent, the ways and modalities that content is presented have been rapidly changing (Anderson, 2020). Over the years, a radical move away from teacher-centered pedagogy to learner-centered pedagogy has emerged along with a shift from modal to multimodal presentation. Existing literature has addressed specific considerations and implications for digital pedagogy in various disciplines such as science, technology, engineering, and mathematics (STEM) programs (Keebler & Huffman, 2020) as well as language learning (Smith & Oliveira, 2019). Väättä and Ruokamo (2021) observe that pedagogical considerations specific to digital environments are threefold: pedagogical orientation, pedagogical practice, and digital pedagogical competence. They proposed a model for digital pedagogy. This model sets forth a framework to enrich the experience of effective learning in a digital space. In the model, pedagogical orientation requires educators to clarify some basics of teaching and to answer certain questions: What kind of learning processes are there? How does the target group of learners learn? How do they as teachers learn? Pedagogical practice is about understanding the methods and tools used for effective teaching. Digital pedagogical competencies are a list of competencies relevant to interaction, content presentation, and

organization for teaching in digital environments. The competencies are reflections of how well educators integrate theory in the process of teaching within their capacity for learning the technology. Considering this framework in alignment with the principles of effective pedagogy (Anderson, 2020), it is appropriate to claim that there must be a particular emphasis on *student active engagement* in learning and *multimodal* and *structured pedagogical strategies* for course design in digital education.

The importance of student active participation in learning derives from learner-centered pedagogy and has been illustrated by the success of extracurricular activities in encouraging cooperation and fostering student responsibility for learning (Mahoney et al., 2009; Zhuoyuan, 2021). In a digital context, active participation goes beyond merely logging in and being present in the learning context. It refers to four types of operationally defined student engagement when using digital technologies for learning: behavior, cognitive, emotional, and social (Bergdahl et al., 2019). These are found to be crucial factors for academic success (Barnawi, 2022; Bettinger et al., 2016). Although active participation increases motivation and willingness to learn, previously acquired digital skills and experiences can further enable learners to engage in digital learning (Bergdahl et al., 2019). Detailed research on what types of engagement can benefit learners and how each of them can be operationalized with tangible indicators of participation contributes to improved pedagogical strategies for teaching adolescents. Livingstone (2010) critically questioned young learners concerning active learning and strategic planning that encourages participation. Her questions seek answers from the participating youths as to whether certain projects or plans “1) invite youth to use digital media for the sake of engaging in the digital environment 2) reach out to new groups who may be disaffected or alienated 3) enable youth to realize their present rights and responsibilities 4) connect youth in peer-to-peer activity 5) provide resources by which youth can generate their agendas and pursue their interests” (Livingstone, 2010, p. 9). In a similar vein, Connolly and McGuinness (2018) also mentioned that learning activities in a digital environment empower students as active agents in the creation of sustainable information society and that digital literacy can be a starting point to devise strategies to encourage active participation. Digital literacy development could improve adolescents’ access to information and their ability to create content as engaged actors. UNESCO highlighted the importance of active learning and collaboration in learning processes, concerning its goal of sustainable education with more participatory and collaborative implementation of pedagogy (UNESCO MGIEP, 2019). Through communication and collaboration within a digital educational environment, learners can improve and practice digital literacy competencies, improve etiquette and interpersonal skills, and share their learning experiences (Nascimbeni & Vosloo, 2019; Türksoy & Karabulut, 2021). This digital education approach is highly likely to prepare children to take part in future employment and to be productive citizens empowered by multiliteracies. Additionally, UNESCO MGIEP (2019) recommend exploring the pedagogical opportunities of digital resources for more effective practice of pedagogy for adolescent learners as they are mostly familiar with the digital practices having been raised in a multimedia-saturated world. Therefore, in addition to interactivity, multimodal and structured pedagogy are to be taken into consideration for the strategic planning of digital pedagogy for adolescents.

Multimodality is a key factor for effective pedagogical strategy and has demonstrable benefits when integrated into various resources such as course modules, electronic books,

videos, live lessons, links, games, mobile applications, virtual reality applications, interactive tests, quizzes, and software. Multimodality is vital for enriching the learning processes (UNESCO MGIEP, 2019). Cope and Kalantzis (2009, p. 166) point out that interactions are naturally “multimodal, with linguistic, visual, audio, gestural and spatial modes of meaning which are increasingly integrated into everyday media and cultural practices”. Learning, which takes place in this interactive context is reinforced and deepened (Cope & Kalantzis, 2017; Reyes-Torres & Portalés Raga, 2020). The multimodal structure is not only limited to the use of various resources but also the multiple contexts in which one can participate in learning such as through digital classes which have emerged as a new form of gathering to learn, using digital search engines and social network sites, and engaging in real-world opportunities beyond online classes. Multimodality, both sensory and contextual, and its affordances for the enrichment of context, is a key concern for language educators creating digital learning experiences for adolescent learners.

Structured pedagogy in alignment with interactivity and multimodality, is defined as *a systemic change in educational content and methods, delivered through comprehensive, coordinated programs that focus on teaching and learning, with the objective of changing classroom practices to ensure that every child learns.* (UNESCO, 2020) The objective of this pedagogy is to equip all children with literacy, numeracy, and the social and emotional skills for lifelong learning. When this objective intermingles with digital pedagogy, we can say that the strategic planning can be built upon inclusive education with equal opportunities to create content and learning atmospheres together through access to information with multi-modal resources and places. While engaging in structured pedagogy, effective language learning outcomes need to recognize the emotional dimension of learning and establish positive relationships with the adolescent. The physical distance between students and teachers has changed the communication styles and roles in digital classrooms and can generate more balanced relationships between learners and teachers (Zou et al., 2021). The students of online education platforms want to be heard and seen as individuals taking up space much as they would in the physical classroom (Kahraman & Subasi, 2022; Fiş Erümit, 2020; Tsybulsky, 2020). Listening to students’ voices as they relate their experiences in digital learning acknowledges the inclusive practice of education and enhances the quality of digital pedagogy for K-12 students (Busher, 2012). Unfortunately, most of the empirical findings based on students’ readiness or perceptions are derived from the higher education context (Zou et al., 2021). Therefore, there exists a need to present K-12 students’ learning experiences regarding their active participation in learning to yield insights for developing appropriate pedagogical strategies for the online education of young learners. At the time of current research, the data come from participants who are only exposed to digital learning as a means of meeting formal education requirements. These evaluations are generally free from the influence of the formal schooling environment.

The current study aims to investigate if active participation makes difference in the performance of language learners, and to explore what elements of digital pedagogy encourage the active participation of adolescents in a digital learning environment by exploring their perspectives and their experiences of online learning for their formal education. This study will contribute to the field by presenting the students’ voices as existing studies have done, but also explore differences in their performances based on defined behaviors of active engagement. This will undoubtedly help to inform a digital

pedagogical stance with an ear to empirical design mixed with input from the students' perspective. As such, the study provides useful guidance for solid planning of digital learning environments for language learning tailored specifically for K-12 students. The student's voice does not always reach consideration in pedagogical designs. Quantifying the tangible benefits of specific interventions and pedagogical approaches in combination with the endorsement of students' voices does merit consideration. The current study revisits the users' experience of the digital learning environment and seeks to quantify whether performance differs with the absence or presence of defined active participation. With these aims, the following research questions were addressed:

RQ1: Are there any significant differences between the pre and post-test scores of students who have had online real-time classes in English classes?

RQ2: Are there any significant differences between the pre and post-test scores of students who have had video classes in English classes?

RQ3: Are there any significant differences between the pre-test and post-test scores of students who have had online real-time and video classes in English classes?

RQ4: Are there any significant differences between the oral communication performance scores of students who have had online real-time and video classes in English classes?

RQ5: What are the elements of digital pedagogy that encourage the active participation of adolescents in a digital learning environment?

RQ6: What considerations should be considered when designing pedagogical strategies for adolescents?

Methods

Participants

A number of students (n=100) from a state school in a southern district of Turkey participated in this study. The sample was chosen based on volunteer participation in a call for recruitment. Among a total of 142 adolescents exposed to formal digital education in the 9th grade, 100 (Female: 57, Male: 43) participants ranging in age from 14-15 years were interested in taking part in the study. They and their families were asked to fill out the consent forms. Participants were administered a language proficiency test (Allan, 2004) before the treatment, it was found that their level of language proficiency was A2. At this grade, students are required to take four hours of English classes per week and are assessed with two subject performance tests, one mid-term, and one final exam to pass the English class during the semester. Flexible online learning environments were supplementary before the 2020 Spring Semester, but with the global and massive transition to digital education necessitated by the Covid-19 pandemic, the formal education system fully shifted to a digital learning platform. However, taking part in classes was still flexible. Students could access the learning content and classes either in the mode of online real-time classes or by viewing recorded video classes. At the time of the data collection, participants had already completed two semesters of online education plus a couple of weeks of face-to-face classes in school.

Procedure and data collection

The researcher collected data after having retrieved all the official consents. There were four classes of 9th graders. The students had the choice of participating in the class online in real-time or offline through recorded videos of the classes. By tracking the attendance for live classes and accessing logging information and the numbers of video viewing, the researcher technically could track the participation of the students. The researcher took part in live classes as an observer and took note of the pedagogical procedures in the class. Each week, the classroom teacher started the online lesson through Zoom and let the students engage in the tasks actively: question-answer sessions and peers or group work for oral communication skill practice, which was mainly either in pairs or groups. The classes were recorded and uploaded to the learning management system. During the semester, each student had two tasks for oral communication skill assessment which was conducted online in real-time for all the students taking English class in 9th grade. The classroom teacher followed the syllabus approved by the Ministry of National Education.

There were two sets of data collections in this study. Qualitative data include a quick proficiency test (Allan, 2004) that revealed students' language proficiency level at the beginning of the treatment and also an assessment grid for oral communication skills. A 50-item multiple-choice test that included vocabulary, grammar, reading, and listening was administered as a pre-test in the second class of the first week with a total possible score of 100. The test was provided with the course book as a teacher's resource and covered the whole content of the syllabus. All the students took it online. Then at the end of the semester, the test was re-administered. The scores were analyzed to see if there were statistically significant differences between the groups' scores. As for the internal consistency reliability, the Cronbach alpha value of the test was calculated and found to be .897. The other score set was derived from the oral communication performance score of students that was based on a scale for online interaction (Council of Europe, 2020). Throughout the semester, students were asked to perform oral communication tasks twice (one in pairs and in groups). The first was pair work about the topic that two students had chosen and the second one was group work in which they were asked to create conversations for discussions based on the given situations and assigned roles. The classroom teacher assessed students' oral performances in the class using the scales of interpersonal and evaluative (understanding an interlocutor, conversations, informal and formal discussions) for oral communication. A total score for each performance was calculated. The Cronbach alpha value of Performance 1 scores was .912 and that of Performance 2 scores was .937.

Qualitative interview data was also collected by the researcher from January to March 2021. The semi-structured interview of 12 questions was created with an expert in the qualitative research method. The purpose, neutrality, and clarity of questions were checked. Scheduled for each of the participants, the interview was recorded on Zoom with the participants' permission and took approximately 40 minutes in participants' L1, Turkish, for clarity of shared thoughts and ideas. Some prompts for clarity or elaboration were provided during the interview when necessary. There were 16 participants, and their names were redacted for privacy. The data was transcribed with the help of student assistants and double-checked against the originality of the recordings by the researcher. The researcher also edited the transcriptions when necessary. Then the transcription in its entirety was translated with the help of Google Translate and corrected for language

accuracy. The translated data was then sent to two language editors, one of them a native speaker of English. The language editor with Turkish as L1 background was also asked to translate the data into Turkish again so that back translation could prove the reliability of the data source. The researcher edited the final version of the data. Both versions were sent to the participants to receive their approval.

Data analysis

For the quantitative analysis of pre and post-test scores, a software program, SPSS 23, was used. As for the qualitative analysis, no computer programs were used to assist with the data analysis because the researcher adopted the research perspective that “only intelligence, creativity, and the reflexivity of the human mind can bring meaning to those data” (Hatch, 2002, p. 148). Data were analyzed thematically in three steps: coding, identifying emergent factors, and deriving themes. The researcher first investigated the data, breaking it into discreet parcels which were then coded as relevant to discrete digital strategies and challenges for engagement using an original set of codes. For the reliability of the codes, the researcher distributed the data with relevant codes to an independent researcher and compared the coding notes between the two coders. The coded data were then reviewed to expose the information with digital strategies for the active involvement of adolescents. The codings highlight these themes implicitly (Creswell, 2013) and were further refined and sorted with a deductive approach.

Results

A paired t-test was applied to analyze the difference between two test scores of students (pre and post-test) and an independent t-test was also conducted to examine if there were differences among the test scores of the groups in pretest and post-test separately. The first four research questions were answered with the analysis displayed in Tables 1-4.

Tables 1 and 2 below present results of the pre and post-test scores of online real-time and video classes, respectively.

Table 1
Results of paired-t test (Online Real-time Classes)

Group	n	Mean	SD	t	df	p
ORC	47	82.553	8.453			
Post				14.542	46	0.000*
ORC	47	65.170	10.232			
Pre						

Table 1 shows that there is a significant difference between the pretest mean score (65.170) and the post-test mean score (82.553) ($t_{(46)} = 14.542$, $p < .05$) of the language test scores of participants in real-time online classes.

Table 2
Results of paired-t test (Video Classes)

Group	n	Mean	SD	t	df	p
VC Post	53	72.735	10.082	7.869	52	0.000*
VC Pre	53	67.566	10.865			

Table 2 shows that there is a significant difference between the pretest mean score (67.566) and the posttest mean score (72.735) ($t_{(52)} = 7.869$, $p < .05$) of the language test scores in video classes.

Table 3 presents independent sample test results between the pre and post-language test results of the groups in online real-time and video classes.

Table 3
Independent T-Test Results (Pre- and Post-Test Scores of Two Groups)

Pre-Test						
Group	N	Mean	SD	t value	df	p value
Online real-time	47	65.170	10.232	-1.131	98	.261
Video	53	67.566	10.865			
Post-Test						
Group	N	Mean	SD	t value	df	p value
Online real-time	47	82.553	8.453	5.238	98	.000*
Video	53	72.735	10.082			

As seen, Table 3 displays that there is not a significant difference between the online real-time class pre-test mean score (65.170 ± 10.232) and the video class pre-test mean score (67.566 ± 10.865) of the language test scores ($t_{(98)} = -1.131$, $p > .05$). It also shows that there is a significant difference between the online real-time class post-test mean score (82.553 ± 8.453) and the video class post-test mean score (72.735 ± 10.082) of the language test scores ($t_{(98)} = 5.238$, $p < .05$).

Independent t-tests were applied to analyze the differences in Performance 1 and 2 scores between online and video classes. Table 4 shows the independent t-test results of both groups' performance scores.

Table 4
Independent T-Test Results (Performance Scores)

Performance 1						
Group	N	Mean	SD	t value	df	p value
Online real-time	47	84.042	10.639	5.188	98	.000*
Video	53	71.226	13.993			
Performance 2						
Group	N	Mean	SD	t value	df	p value
Online real-time	47	86.542	8.653	7.422	98	.000*
Video	53	69.339	14.151			

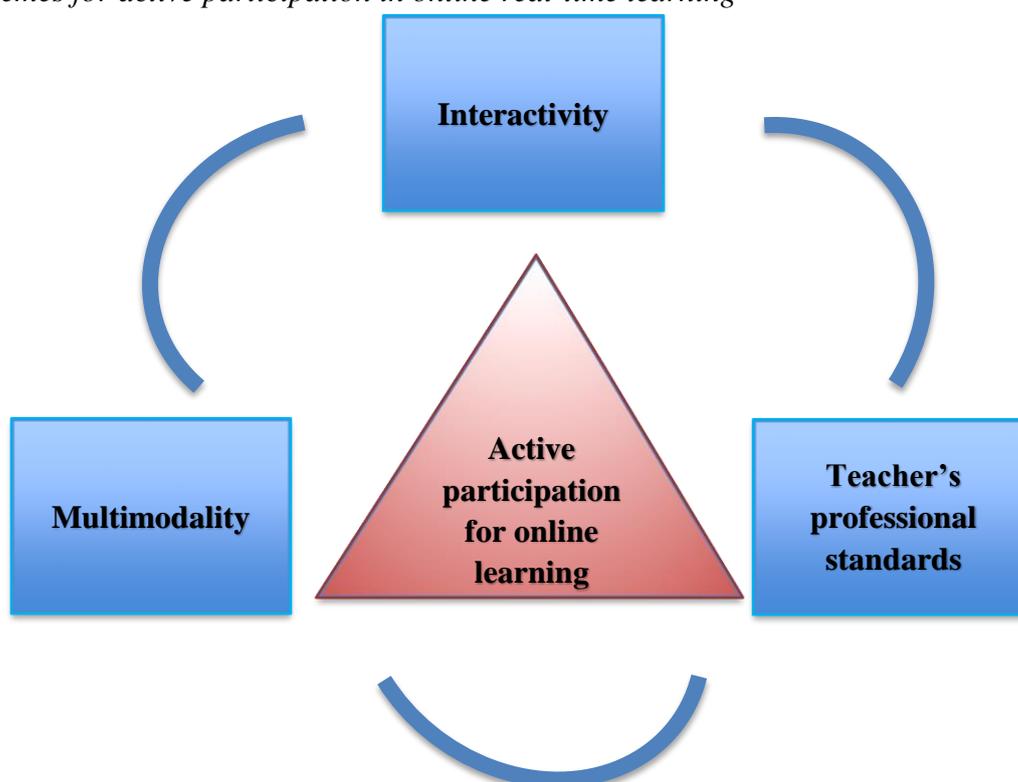
Table 4 shows that there is a significant difference between the online real-time class Performance-1 score (84.042 ± 10.639) and the video class Performance 1 score

(71.226 ± 13.993) for oral communication skills ($t(98) = 5.188, p < .05$). It also shows that there is a significant difference between the online real-time class Performance 2 score (86.542 ± 8.653) and the video class Performance 2 score (69.339 ± 14.151) of oral communication skills ($t(98) = 7.422, p < .05$).

The qualitative findings of the data were analyzed to answer research questions 5 and 6. The analysis exposed three themes: 1) interactivity 2) multimodality 3) teacher's professional standards as shown in Figure 1 as for the active participation of students in online learning

Figure 1

Themes for active participation in online real-time learning



Interactivity

Interactivity describes learners' participation in the form and content of the mediated environment (Steuer, 1993). The way learners create a meaningful link to the form and the content and how they respond to them physically (such as tapping on the screen, sorting through the options, etc.) and cognitively (processing content, connecting it with the existing knowledge, etc.) denotes the interaction. Interactivity, as the findings display, correlates with the willingness of their participation. Most participants in the study pointed out that the interactivity with the material and the way the material was presented promoted their active participation in learning irrespective of when the online course was scheduled. The form and the content having space for their learning in a responsive mode paved a way for participation, which is an outcome of a good design and delivery of the content. Participants agreed with the fact that sessions become

monotonous when the content is teacher-centered and leaves little space for their understanding and reflection. P16 explained this:

I find myself interested in lessons when my teachers attract my attention by asking questions that make us think and brainstorm.

Participants also mentioned anxiety in that they had to interact not only with the teacher but also with others in the digital classroom. This interactivity called for social cooperation to answer questions and being actively involved in the learning tasks of the content being delivered. They reported a willingness not only to express their voices but also their voice as a class together. P2 and P8 explained:

To be honest, subjects for which an opinion is expected encourage active participation. I liked being asked my opinions and working in groups rather than listen to my teacher's solo lecture in the class or having to respond individually to questions. Sometimes I fear making mistakes or failing in answering a question when our teacher throws a question to the class. I feel more on topic with my peers in group work. (P2)

When the lecture is live and narrated with interesting examples or background of the subjects rather than videotaped or just reading through presentation slides, I feel more interested in participation. This somehow increases my interest in taking a part. (P8)

Interactivity was regarded as a priority for successful online sessions. Participants also commented on other issues such as group work and social interactivity when learning in a technology-mediated environment. Pedagogical strategies must be designed to be interactive when the mode of instruction is digital and delivered online in real-time.

Multimodality

Multimodality refers to the enrichment of the forms of communication available in online real-time modes of instruction in digital educational platforms. In a digital teaching environment, pedagogical strategies should include multimodal learning experiences for learners, which could be realized in the audio-visual, textual, bodily, and spatial arrangements of the content to provide appropriate meaning-driven resources. P7 commented:

Learning through slides is no fun. When my teacher shows up live, I can make meaning of what she is teaching with her facial movement.

P11 commented likewise:

Teachers are live during the lessons. It is effective for me. I just would like them to use more visuals when they teach us. I do not want to learn only through textual information from teachers' live lectures or notes on the boards. Visuals in our

course books are not like real ones or satisfying. I would prefer digital visual examples from YouTube.

Multimodality is not only important during the lecture but also when students are self-regulated after the sessions. P14 highlighted that:

After the online real time courses, I try to keep up with the course materials. Sometimes I find only pdfs or videos of the past sessions. When they are varied with some alternative resources for further inquiry on the topic such as websites links, or videos, I feel motivated to learn and manage my time for learning.

Teacher professional standards

Professional standards are descriptive statements of practice expectations from teachers in terms of professional attributes, knowledge, and skills (Teacher Standards, 2011). These standards help teachers operate their practice and provide a framework of professional goals to reach and fulfill. Digital pedagogies require generating different modes of instructional interactivity to exploit the online real-time and offline teaching opportunities afforded by mobile environments. Learners are exposed to digital pedagogies reflective of teachers' professional standards in three core dimensions: professional attributes, professional knowledge and understanding, and professional skill (TDA, 2007). When planning to teach young adults, integrating key sub-dimensions of these core standards is vital to maintaining up-to-date effective online pedagogies. In the findings of the current study, some of these sub-dimensions were specifically mentioned. Professional attributes such as fostering a positive relationship with young people, professional knowledge such as learning and teaching the content, and professional skills such as planning and giving appropriate feedback were found to be important for effective online teaching of young adults. P13 commented that:

I am afraid to state my answers or thoughts thinking that my teachers can criticize me harshly in front of others. This thought affects me, and I prefer to stay silent mostly.

Some of my teachers are positive about our mistakes, or polite while correcting us, I like these teachers more as they offer us a good hand.

These two exemplary statements from the participants show that a positive relationship with young people as a dimension of professional attributes is important in the eye of the participants. Teachers should maintain a supportive and constructive rapport with young people when teaching.

When I receive my online education and see my teachers are in the mood for teaching, I mean, when I see them willing to teach us, I like my lessons more. (P11)

Teachers' willingness to deliver the content and teach young learners was also mentioned. Interestingly, some of the participants highlighted that for the online real-time

classes, they wanted to see teachers' cameras on. It was highlighted that seeing teachers live (on camera) positively affects young adolescents.

I can say that the most important element is to improve myself in the lessons. I can see my shortcomings or difficulties only by participating in the lessons. I know that but sometimes it is boring, and you just want to skip. I know that I can gain different experiences with these online classes but for me it is effective when I see my teachers online and live. I look at their face and hand movements to make meanings. (P9)

The interesting nature of the lesson depends on the teachers' motivation-enhancing and remarkable lecture style. To be able to see the teacher while lecturing is a good thing. (P6)

Another finding is related to the teacher's professional skills which cover designing and planning online real-time lessons which incorporate information from the syllabus, build on previous lessons and assign engaging tasks to be fulfilled by the students. Some of the participants mentioned that when teachers reschedule the classes or carry out a task that is not planned, it can create a problem for them to effectively partake in the class or manage their learning. P6 commented that

Online lesson is interesting for me when it is not scheduled early time. I do not feel fully awake when it is early. I feel the first session is a wakeup call for me. Additionally, there is one point I totally feel off. Sometimes the lectures are cancelled or rescheduled when we are ready for it, with no earlier notice, then we feel frustrated. Why rescheduling at the last minute? I really cannot understand it. That is not good for me.

These three themes, interactivity, multimodality, and teacher's professional standards emerged as crucial elements to consider when designing and planning digital strategies for effective teaching. What elements young adult learners value as motivators to take an active part in an online real-time learning environment should inform educators of digital strategies for teaching young adults.

Discussion

The noteworthy results affirm that active participation with the online learning content in a synchronous mode brought significantly more effective language learning outcomes. This result, of course, was expected as the synchronous group had more opportunities for engagement both with learning materials and while experiencing the other dynamics of the classes such as teacher and the peer interactions which were not available to the asynchronous learners. It is believed that classroom participation whether online in real-time, video or in a physical classroom may play a crucial role in students' motivation for learning and improves learning outcomes (Korpershoek et al., 2020). Here, the collaborative atmosphere in the online real-time classroom as well as the teacher leading the sessions with a question-and-answer format while reviewing assignments

checked in class might have helped students to make a more meaningful connection between the content of the material and student's experiences of language learning. This result was in line with Bailey's (2021) study that provides the insight that participation in EFL classes in remote online classes is linked to academic achievement and that the interactivity among learners, peers, teachers, and the content itself can have a significantly positive effect on learning outcomes, maximizing their potential for language learning. Moreover, interactivity might have an affective impact on learners. As Hong et al. (2021) claimed, active engagement in online learning can yield less dissatisfaction with students' perceived learning effectiveness. Therefore, like a domino effect, it can cause higher motivation and satisfaction in learning a foreign language. However, the result pertaining to the outperformance of students in online real-time classes conflicted with the study by Davies and Graf (2005). In that case, the researchers found that online participation did not make any significant difference or translate into improved grades.

Developing effective pedagogical strategies for encouraging the active participation of adolescents requires integrating core elements for active participation from the perspective of the users (learners in this context) and appraising these strategies for effective learning outcomes. User voices advocate preconditions for equal participation in designing the pedagogical framework for a future globally inclusive world. The transition from a four-walled, physical teaching environment to new classrooms in a digital media-enriched space has brought to light concerns which require rethinking key strategies and pedagogical stances to navigate this changing space more successfully. Although the pedagogical pillars of both contexts (online real-time and physical) share certain common principles regarding assessment, material designs, and development as Anderson (2020) commented, the new generation of techno-savvy adolescent learners and global citizens of the digital social world encompassed by social media might demand a new way of learning. This "new world" form of learning presupposes a greater familiarity with various extant and emerging digital platforms and acknowledges that the skills they foster can be intermingled with emergent learning styles. This does not necessarily mean inventing something new for educators but reinventing how we apply what we already know as educators to make bridges between everyday pedagogical practice and online classroom practice (Kajder, 2010). It means that rethinking pedagogical strategies for teaching adolescents at K-12 is a fundamental matter for both educators and policy makers. Their voices are crucial to developing strategic plans for effective pedagogy and promoting quality foreign language education for future digital citizens of the world. This study has aimed to provide some insights from the Turkish context of formal online education. The qualitative findings suggest that interactivity is an appealing condition for K-12 students and encourages them to be active in their learning. This finding is congruent with the studies by Fiş Erümit (2020) and Xu (2021) that students seek out interactions both with teachers and peers in online settings and that a lack of interaction creates affective problems such as boredom and unwillingness to engage. Brainstorming, asking for personal views without intruding on personal space and unwittingly creating anxiety for learners, allows learners to voice out thoughts and attracts their attention as participatory learners in the online language learning process. This interactivity is in line with the psychology and emotions of learners in that they mediate their participation by their emotions, feelings, and personal opinions. Therefore, for an effective pedagogical strategy, *interactivity* is considered as not just an element of the direction of the message conveyed in online classroom communication but

also recognized for its influence on affect and the psychology of K-12 learners and how it functions as a support for their social and emotional development (Picciano, 2017). Expressing their opinions and experiences of learning can lead to improved affect and better language learning outcomes for K-12 learners.

Multimodality is another element to consider for pedagogical strategy planning for K-12 learners as online learners. This dimension of pedagogy is primarily relevant to the context of teaching. When multimedia teaching content is presented to learners, learning is enhanced enormously (Mayer, 2009). Therefore, to improve the quality of learning and create enduring and sustainable effects of learned information in real life, the multimodal dimension has to be taken into account for course resource provisions (Picciano, 2017; Reyes-Torres & Portalés Raga, 2020) This finding also shows a quite good congruence with Fiş Erümit's study and it is interesting to see that online teaching at the K-12 level in different regions of Turkey have pointed out the multimodal content design is favored for K-12 learners. It should be noted that the infrastructure for online education was not ready prior to the switch to online classes and that in-service training for content development was not mentioned as a crucial professional development subject for traditional face-to-face teaching. All of a sudden due to Covid19, when all teachers had to shift to teaching online for formal education, the problems of single-mode of teaching content and context were found to be a disaffecting factor for the learners especially when they were squeezed into the digital platform EBA with no live physicality but merely name-surname to mark presence in online classes. In seeking an integrated model for online education, Picciano (2017) suggests taking in content planning (multimedia, games, learning/content management system) as a pedagogical aspect for developing effective sustainable strategies. The students' perspectives on online foreign language education and their active participation confirm this aspect from the users' end.

Both interactivity and multimodality as elements for active participation are linked with the constructive theory of learning. The constructive theory does not only promote personal engagement and meaning-making through experiences and forming cognitive links between new and *a priori* information but also highlights that learning is by nature a social phenomenon because it is embedded within a social context where individual elements such as students and teachers cooperate to create knowledge. The interactivity among invested parties both as individuals responding to content and individuals responding to each other is the core element that enhances learning outcomes. Therefore, it is crucial to consider to what extent we can create language content and tasks which lead to interactive and meaningful learning experiences. The constructivist theory specifically suggests that when learners explore their own learning experiences to create understanding it is best to apply primary sources in multimodal form (audio/video, visuals, or print/digital), which are considered to provide richer representation and encourage the development of knowledge (Jewitt and Kress, 2003). Presenting multimodal resources in a way that requires peer-to-peer interaction should lead to enhanced engagement and learning outcomes by design.

Teachers' professional standards are found to be related to the practice of structured pedagogy. Online teaching and organization are key mechanisms for applying these pedagogical strategies. Supporting teachers' adaptation to online media content delivery, choice of appropriate methods, and well-coordinated provisions with informative steps for the processes of learning warrants greater scrutiny to assure quality outcomes in learning. Teachers' scheduling of classes, content delivery, skills for the

integration of content knowledge with technical knowledge, and feedback styles can reflect structured pedagogy. This is important for encouraging active participation for K-12 learners. Kim and Davidson (2019) noted that for effective online teaching and literacy, structured pedagogy suggests certain considerations for maximizing the effectiveness of online language teaching for K-12. These include well-set schedules and resource provisions and providing timely constructive feedback to adolescent learners. This suggestion was echoed in a study from a higher education context, which recommended educators teach integrated skills in online classes with flexibility in teaching and alternative assessment and evaluation to increase active participation in online ELT classes (Türegün Çoban & Kuyumcu Vardar, 2021).

The finding of the current study supports that the presence of structured pedagogy encourages K-12 students to actively participate in online language learning and enhances language learning and socio-emotional learning. Improved pedagogical strategies, warrant the review of teaching professional standards, developing explicitly interactive and multimodal content and contexts, and providing socio-emotional support to K-12 learners while teaching English online.

Conclusion

This research sheds light on pedagogical strategies for encouraging active participation in online English classes. It has aimed to explore elements for active participation in online classes from the K-12 students' perspectives and found that the students who received the language learning content synchronously outperformed their peers in English language learning. While this was the expected result, the themes which emerged from the structured interviews as being key to a positive student experience, namely: interactivity, multimodality, and teaching standards are endorsed as key elements in drawing up a framework for educational policies which promote a sustainable and successful future for young people. These findings underscore the importance of ICT literacy for language teachers. Indisputably, more work is needed for teacher professional development and in-service training for fostering ICT skills and teaching competencies in an online setting to close the gap between students of generation Z and educators regarding technological literacy, acceptance, and familiarity. Further research can be done on factors that impact the academic success of adolescents and tracing how they interact with content delivered through online portals using learning analytics and time on task to clarify the effects of these elements on the academic success of adolescents.

The primary implication of this current research is that when teachers design their course in a digital environment, it is effective to consider how the design facilitates active participation, and thereby promotes meaningful language learning as an outcome. To this end, the authors recommend that interactive tasks and content are delivered through multimodal forms in which students necessarily take an active role. Moreover, it is beneficial for teachers to be well equipped with the use of technology in language classes. Technological literacy allows teachers to make online content delivery more effective and interesting for students. Well-designed interactive content effectively delivered can create a positive experience promoting the students' desire to actively engage with the classes which is a tangible predictor of positive learning outcomes. Designing elements for active participation in the MALL or CALL environment is not the sole element required to

secure effective digital teaching. The highlighted themes in this research reflect just some elements of effective teaching practice. Progress in effective curriculum design should also account for differences in learning processes among students and accessibility must be a core consideration of teachers, educators, and curriculum designers. The voice of students can inform the pedagogical design, but the performance outcomes must also be investigated to further explore what other elements serve our students to learn English more effectively through digital environments.

Limitations and Suggestions for further research

This study has two notable limitations. Future work should address these limitations. First, as the participation was voluntary, the positive responses to the call were considered for the analysis. At the time of data collection, there were national Covid 19 lockdowns, therefore, the data collection was available only online, not face to face. The selection of participants and the data collection process could be different in future research designs. The second limitation is the scope of the literature review on K-12 where most of the empirical studies are related to English as a foreign language setting in higher education. While this limitation reflects the current state of research, it underscores that further research should be designed to investigate how students' motivation and learning styles impact active participation and performance in English classes in digital environments.

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